

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows.

1. (Previously Presented) A vehicular headlamp, comprising:

a semiconductor light emitting device facing in a direction substantially perpendicular to a forward direction;

a reflector configured in a curved shape having an aperture in a front side to surround said semiconductor light emitting device, wherein said reflector has an optical center thereof in proximity of said semiconductor light emitting device, and reflects light incident from said semiconductor light emitting device toward the front side; and

a light transmitting member configured to cover said semiconductor light emitting device, wherein said light transmitting member comprises a rear sealing part shaped like a quarter sphere and a front sealing part shaped such that a radius of curvature of a surface in a cross section parallel to the forward direction is smaller than a radius of curvature of a surface of the rear sealing part, wherein the front sealing part deflects a portion of light generated by said semiconductor light emitting device toward the front side and the rear sealing part transmits a portion of said light generated by said semiconductor light emitting device toward said reflector.

2. (Previously Presented) A vehicular headlamp, comprising:

a semiconductor light emitting device facing in a direction substantially perpendicular to a forward direction;

a reflector configured in a curved shape having an aperture in a front side to surround said semiconductor light emitting device, wherein said reflector has an optical center thereof in proximity of said semiconductor light emitting device, and reflects light incident from said semiconductor light emitting device toward the front side; and

a light transmitting member configured to cover said semiconductor light emitting device, wherein said light transmitting member comprises a front sealing part and a rear sealing part, wherein the front sealing part deflects a portion of light generated by said semiconductor light emitting device toward the front side and the rear sealing part transmits a portion of said light generated by said semiconductor light emitting device toward said reflector;

wherein said reflector is formed to cover said light transmitting member from a rear side of said semiconductor light emitting device, and said light transmitting member comprises:

the rear sealing part having a shape like a quarter sphere having a focal point in proximity of said semiconductor light emitting device, wherein said rear sealing part seals a rear side of said semiconductor light emitting device; and

the front sealing part having a shape in which a radius of curvature of a surface in a cross section parallel to the forward direction is smaller than a radius of curvature of a surface of said rear sealing part, wherein said front sealing part is formed integrally with said rear sealing part to seal a front side of said semiconductor light emitting device.

3. (Previously Presented) The vehicular headlamp as claimed in claim 1, further comprising a lens disposed in the front side, wherein said lens receives said reflected light by the reflector and said deflected light by said light transmitting member.

4. (Previously Presented) A vehicular headlamp, comprising:

a semiconductor light emitting device facing in a direction substantially perpendicular to a forward direction;

a reflector configured in a curved shape having an aperture in a front side to surround said semiconductor light emitting device, wherein said reflector has an optical center thereof in proximity of said semiconductor light emitting device, and reflects light incident from said semiconductor light emitting device toward the front side;

a light transmitting member configured to cover said semiconductor light emitting device, wherein said light transmitting member comprises a front sealing part and a rear sealing part, wherein the front sealing part deflects a portion of light generated by said semiconductor light emitting device toward the front side and the rear sealing part transmits a portion of said light generated by said semiconductor light emitting device toward said reflector;

a lens disposed in the front side, wherein said lens receives said reflected light by the reflector and said deflected light by said light transmitting member; and

a light blocking member, provided between said semiconductor light emitting member and said lens, operable to block a part of said light generated by said semiconductor light emitting device, wherein

said reflector converges said reflected light in the vicinity of an edge of said light blocking member,

 said lens forms at least a part of a cut line for defining a boundary between a bright region and a dark region in a light distribution pattern of said vehicular headlamp based on a shape of said edge of said light blocking member, and

 said light transmitting member deflects forward a part of said light generated by said semiconductor light emitting device to make said part of said light pass in the vicinity of said edge of said light blocking member.

5. (Previously Presented) The vehicular headlamp as claimed in claim 1, wherein said reflector reflects said light generated by said semiconductor light emitting device toward a substantially horizontal direction, and said light transmitting member deflects a part of light generated in the forward direction by said semiconductor light emitting device, toward said substantially horizontal direction.

6. (Canceled).

7. (Previously Presented) The vehicular headlamp as claimed in claim 3, wherein the portion of light, deflected by said light transmitting member toward the front side, pass in a vicinity of a focus of the lens.

8. (New) A vehicular headlamp, comprising:

 a semiconductor light emitting device facing in a direction substantially perpendicular to a forward direction;

a reflector configured in a curved shape having an aperture in a front side to surround said semiconductor light emitting device, wherein said reflector has an optical center thereof in proximity of said semiconductor light emitting device, and reflects light incident from said semiconductor light emitting device toward the front side; and

a light transmitting member configured to cover said semiconductor light emitting device, wherein

said light transmitting member comprises a rear sealing part shaped like a quarter sphere and a front sealing part shaped such that a radius of curvature of a surface in a cross section parallel to the forward direction is smaller than a radius of curvature of a surface of the rear sealing part,

the front sealing part deflects a portion of light generated by said semiconductor light emitting device toward the front side and the rear sealing part transmits a portion of said light generated by said semiconductor light emitting device toward said reflector,

said light transmitting member comprises a deflection member covering the front side of the front sealing part, and

a radius of curvature of a front face of the deflection member is smaller than the radius of curvature of a front face of the front sealing part.

9. (New) The vehicular headlamp as claimed in claim 8, further comprising a lens disposed in the front side, wherein said lens receives said reflected light by the reflector and said deflected light by said light transmitting member.

10. (New) The Vehicular headlamp as claimed in claim 8, further comprising a light blocking member, provided between said semiconductor light emitting member and said lens, operable to block a part of said light generated by said semiconductor light emitting device, wherein said reflector converges said reflected light in the vicinity of an edge of said light blocking member,
- said lens forms at least a part of a cut line for defining a boundary between a bright region and a dark region in a light distribution pattern of said vehicular headlamp based on a shape of said edge of said light blocking member, and
- said light transmitting member deflects forward a part of said light generated by said semiconductor light emitting device to make said part of said light pass in the vicinity of said edge of said light blocking member.
11. (New) The vehicular headlamp as claimed in claim 8, wherein said reflector reflects said light generated by said semiconductor light emitting device toward a substantially horizontal direction, and said light transmitting member deflects a part of light generated in the forward direction by said semiconductor light emitting device, toward said substantially horizontal direction.
12. (New) The vehicular headlamp as claimed in claim 9, wherein the portion of light, deflected by said light transmitting member toward the front side, pass in a vicinity of a focus of the lens.
13. (New) The vehicular headlamp as claimed in claim 2, further comprising a lens disposed in the front side, wherein said lens receives said reflected light by the reflector and said deflected light by said light transmitting member.

14. (New) The Vehicular headlamp as claimed in claim 2, further comprising a light blocking member, provided between said semiconductor light emitting member and said lens, operable to block a part of said light generated by said semiconductor light emitting device, wherein said reflector converges said reflected light in the vicinity of an edge of said light blocking member,
- said lens forms at least a part of a cut line for defining a boundary between a bright region and a dark region in a light distribution pattern of said vehicular headlamp based on a shape of said edge of said light blocking member, and
- said light transmitting member deflects forward a part of said light generated by said semiconductor light emitting device to make said part of said light pass in the vicinity of said edge of said light blocking member.
15. (New) The vehicular headlamp as claimed in claim 2, wherein said reflector reflects said light generated by said semiconductor light emitting device toward a substantially horizontal direction, and said light transmitting member deflects a part of light generated in the forward direction by said semiconductor light emitting device, toward said substantially horizontal direction.
16. (New) The vehicular headlamp as claimed in claim 13, wherein the portion of light, deflected by said light transmitting member toward the front side, pass in a vicinity of a focus of the lens.